

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

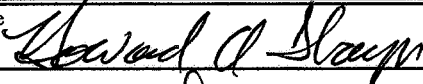
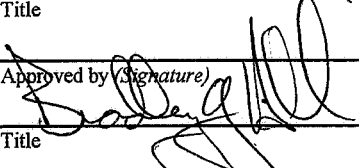
FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER			5. Lease Serial No. UTU-76262		
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone			6. If Indian, Allottee or Tribe Name N/A		
2. Name of Operator Pannonian Energy, Inc.			7. If Unit or CA Agreement, Name and No. N/A		
3A. Address 14 Inverness Dr. E., Englewood, CO 80112		3b. Phone No. (include area code) (303) 483-0044	8. Lease Name and Well No. Federal 11-28-9-19		
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2152' FNL & 547' FEL (SENE) At proposed prod. Zone 660' FNL & 660' FWL, Section 28-T9S-R19E			9. API Well No. 43-047-34193		
14. Distance in miles and direction from nearest town or post office* Approximately 27 miles from Myton, Utah			10. Field and Pool, or Exploratory Riverbend		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 547'			11. Sec., T., R., M., or Blk. and Survey or Area SHL: Section 29-T9S-R19E		
16. No. of Acres in lease 900.18		17. Spacing Unit dedicated to this well 40			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. See Map C		19. Proposed Depth 9364' MD		20. BLM/BIA Bond No. on file Utah BLM Bond No. 4127759	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4854' GL		22. Approximate date work will start* Upon Approval		23. Estimated duration 22 days	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) Howard Sharpe	Date 7-5-01
Title Vice President		
Approved by (Signature) 	Name (Printed/Typed) BRADLEY G. HILL	Date 10-15-01
Title RECLAMATION SPECIALIST III	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

RECEIVED

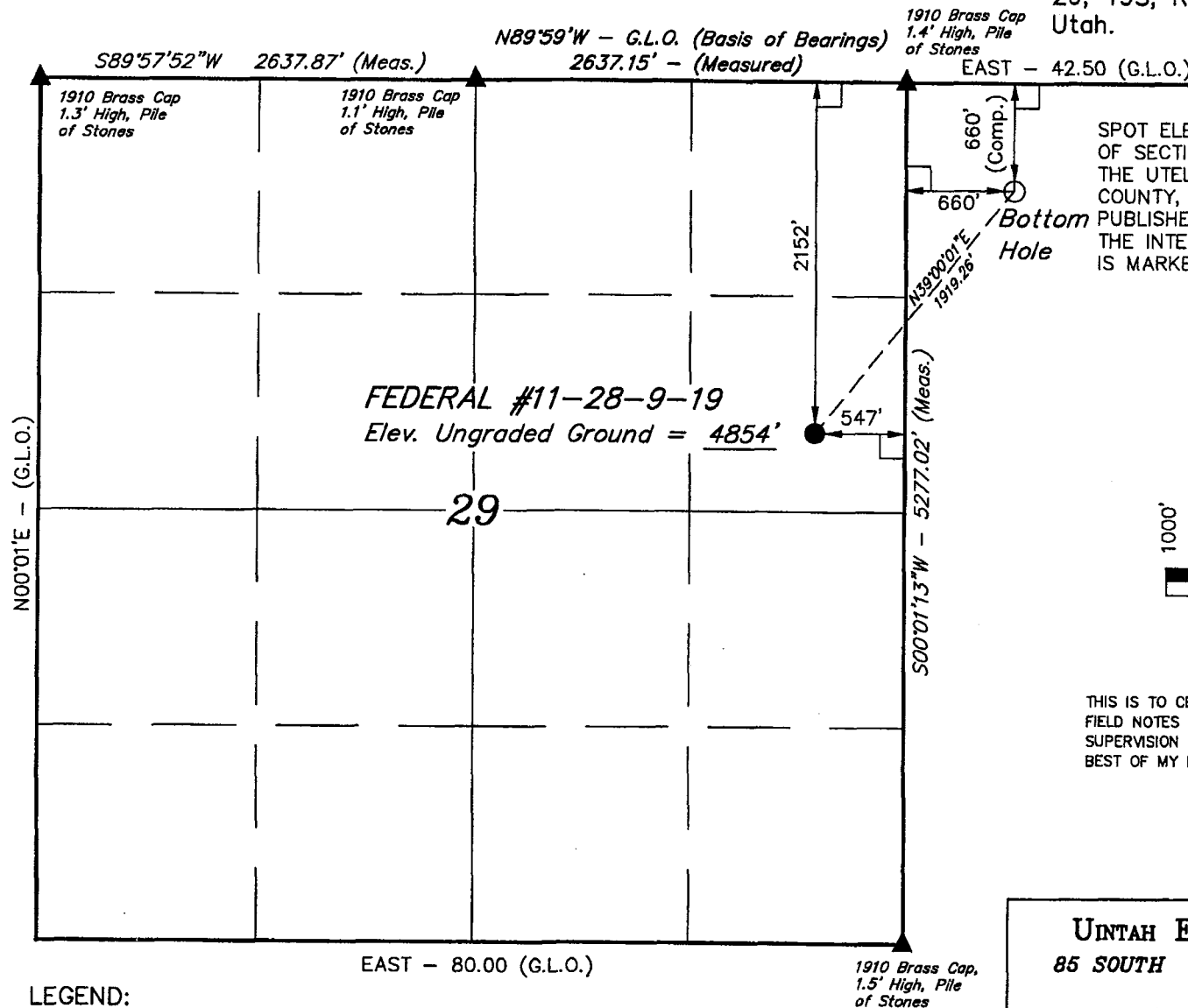
JUL 11 2001

DIVISION OF
OIL, GAS AND MINING

PANNONION ENERGY, INC.

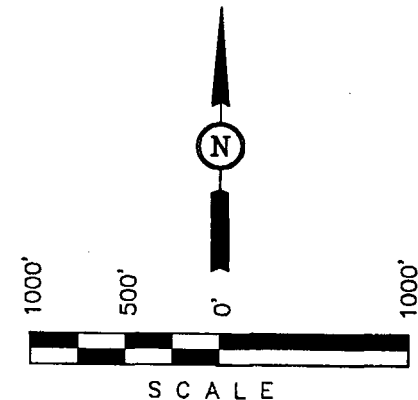
T9S, R19E, S.L.B.&M.

Well location, FEDERAL #11-28-9-19, located as shown in the SE 1/4 NE 1/4 of Section 29, T9S, R19E, S.L.B.&M., Uintah County, Utah.



BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHWEST CORNER OF SECTION 29, T9S, R19E, S.L.B.&M. TAKEN FROM THE UTELAND BUTTE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4771 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 6-10-01	DATE DRAWN: 6-11-01
PARTY J.F. P.J. C.G.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE PANNONIAN ENERGY, INC.	

PANNONIAN ENERGY, INC.

Federal 11-28-9-19
SHL: SENE, Section 29-T9S-R19E
BHL: Section 28-T9S-R19E
Uintah County, Utah
Lease No. UTU-76262

DRILLING PLAN

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS & ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Formation	Depth (ft)	Hydrocarbon/Water Bearing Zones
Uintah	Surface	
Green River	1802'	Gas/Oil
Wasatch	5352'	Gas
TD	9364' MD	

All usable (<10,000 ppm TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. All significant oil and gas shows will be tested to determine commercial potential. This information shall be reported to the Vernal BLM Office.

2. PRESSURE CONTROL EQUIPMENT:

All well control equipment shall be in accordance with Onshore Order #2 for 5M systems.

The minimum specifications for pressure control equipment that will be provided are included on the attached schematic diagram showing size, pressure ratings, testing procedures, and testing frequency.

5000# BOP With 4-1/2" Pipe Rams
5000# BOP With Blind Rams
5000# Annular

Auxiliary equipment to be used:

- Upper kelly cocks with handle available.

The manifold includes appropriate valves and adjustable chokes. The kill line will have one check valve. Ram type preventers will be pressure tested to full working pressure (utilizing a test plug) at:

- initial installation;
- whenever any seal subject to test pressure is broken;
- following related repairs;
- at 30 day intervals

The annular preventer will be pressure tested to 50 percent of the rated working pressure. All pressure tests shall be maintained at least ten minutes or until provisions of test are met, whichever is longer.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip.

A BOPE pit level drill will be conducted weekly for each drilling crew.

All tests and drills will be recorded in the drilling log.

The accumulator will have sufficient capacity to open the HCR valve, close all rams plus the annular preventer, and retain 200 psi above pre-charge pressure without the use of closing unit pumps. The system will have two independent power sources to close the preventers in accordance with 5M system requirements outlined in Onshore Order #2.

Remote controls shall be readily accessible to the driller. Master controls shall be at the accumulator.

3. CASING & CEMENTING PROGRAM:

A. The proposed casing program will be as follows:

Depth	Hole Size	Size	Grade	Weight	Thread	Condition
0-400'	12-1/4"	8-5/8"	K-55	24#	LT&C	New
0-TD	7-7/8"	4-1/2"	N-80	11.6#	LT&C	New

The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including: presence/absence of hydrocarbons, fracture gradients, usable water zones, formation pressures, lost circulation zones, other minerals, or other unusual characteristics.

All casing, except conductor casing, shall be new or reconditioned and tested. Used casing shall meet or exceed API standards for new casing.

The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing. If drive pipe is used, it may be left in place if its total length is less than twenty feet below the surface. If the total length of the drive pipe is equal to or greater

than twenty feet, it will be pulled prior to cementing surface casing, or it will be cemented in place.

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc., shall be utilized to help isolate the cement from contamination by the mud being displaced ahead of the cement slurry.

All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or to 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. If pressure declines more than 10% in 30 minutes, corrective action shall be taken.

The bottom three joints of the surface casing will have one centralizer per joint and one centralizer every fourth joint thereafter.

Casing design subject to revision based on geologic conditions encountered.

B. The proposed cementing program will be as follows:

Surface String: Cement will be circulated to surface. Estimated volume (100% over theoretical value):

290 sx Premium Plus, 2% CaCl₂ w/0.25 #/sx Flocele @ 15.6 ppg, 1.19 ft³/sx.

Production String: Estimated volume (gauge hole + 15%):

Lead: 469 sx Hifill @ 11.0 ppg, 3.84 ft³/sx.

Tail: 1397 sx 50/50 POZ @ 14.35 ppg, 1.26 ft³/sx.

Actual volumes will be calculated and adjusted with caliper log prior to cementing. Ten percent excess will be pumped.

For surface casing, waiting on cement time will be adequate to achieve 500 psi compressive strength at the casing shoe prior to drilling out.

Anticipated cement tops will be reported as to depth, not the expected number of sacks of cement to be used. The Vernal District BLM Office will be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.

After cementing the surface pipe and/or any intermediate strings, but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the Driller's Log.

4. DRILLING FLUIDS PROGRAM:

Interval	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-400'	Spud	8.4 -9.0	30-45+	8.0	NC	Gel & lime as required.
400'-Top of Wasatch	Wtr/gel	8.4-8.8	27-35	8.5-9.0	NC	Min. Wt.
Top of Wasatch-TD	KCL Mud	8.5-8.8*	35-45	9.0-11.0	10-15cc @ TD	* Min Wt. to control formation pressure.

NC = no control

Sufficient quantities of mud material will be maintained on site or be readily accessible for the purpose of assuring well control. SPR will be recorded on daily drilling report after mudding up. Visual mud monitoring will be conducted during operations.

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

5. EVALUATION PROGRAM:

Logs: DLLT/GR: TD to base surface casing
SDL/DSN/GR/CAL: TD to 300' above Green River
MRIL: TD to 100' above Wasatch
(at operators discretion)

Cores: None anticipated.

DST's: None anticipated.

When cement has not been circulated to surface, the cement top will be determined by either a temperature survey or cement bond log. Should a temperature survey fail to locate the cement top, a cement bond log will be run. A field copy will be submitted to the Vernal BLM office.

Drill stem tests, if they are run, will adhere to the following requirements:

Initial opening of the drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the Authorized Officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vapor-proof for safe operations). Packers can

be released, but tripping shall not begin before daylight, unless prior approval is obtained from the Authorized Officer. Closed chamber DST's may be performed day or night.

Some means of reverse circulation shall be provided in case of flow to the surface showing evidence of hydrocarbons.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that are required to be operational during the test shall have spark arresters or water-cooled exhausts.

6. ABNORMAL CONDITIONS:

No anticipated abnormal pressures or temperatures are expected to be encountered. No hydrogen sulfide is expected.

Anticipated bottom-hole pressure is 4054 psi.

7. OTHER INFORMATION:

The anticipated starting date and duration of the operation will be as follows:

Starting Date:	Upon Approval
Duration:	15 Drilling Days & 7 Completion Days

If the well is completed as a dry hole or as a producer, Well Completion or Recompletion Report and Log (Form 3160-4) will be submitted within 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3160. Copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, daily drilling reports, daily completion reports, and all other surveys or data obtained and compiled during the drilling, completion, and/or workover operations, will be submitted directly to the Authorized Officer or filed with Form 3160-4.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

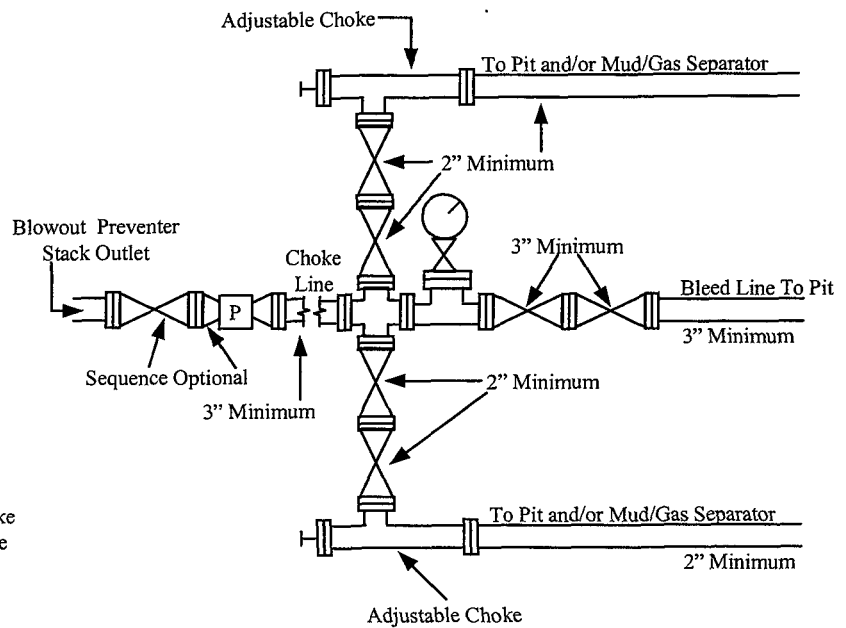
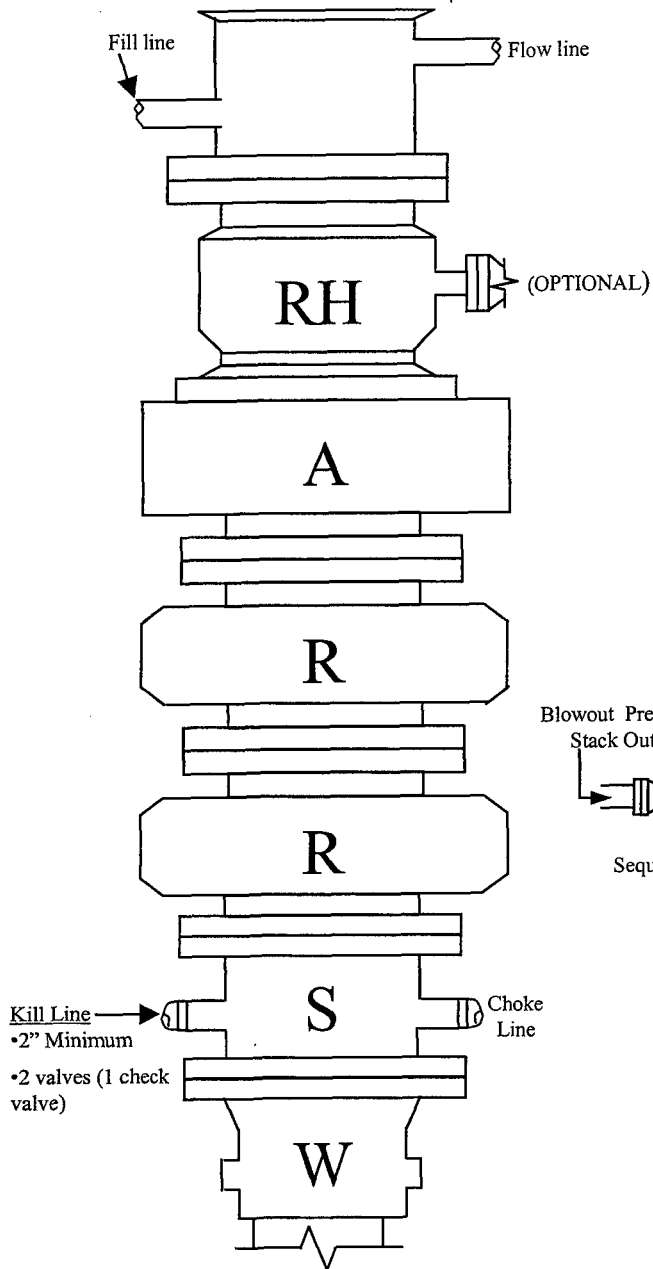
Deviations from the proposed drilling and/or workover program will be approved by the Authorized Officer. Safe drilling and operating practices will be observed. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders No. 1 and No. 2, and the approved Plan of Operations. The Operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

DOUBLE RAM TYPE PREVENTERS WITH AN OPTIONAL ROTATING HEAD

5000 psi system



* Note: Kill line shall be 2" minimum diameter and have two valves, one of which shall be a check valve. Both valves: 2" minimum.

Minimum BOP Stack

One Pipe Ram

One Blind Ram

One Annular

Well Head

Manifold

5000 psi Working Pressure

5000 psi Working Pressure

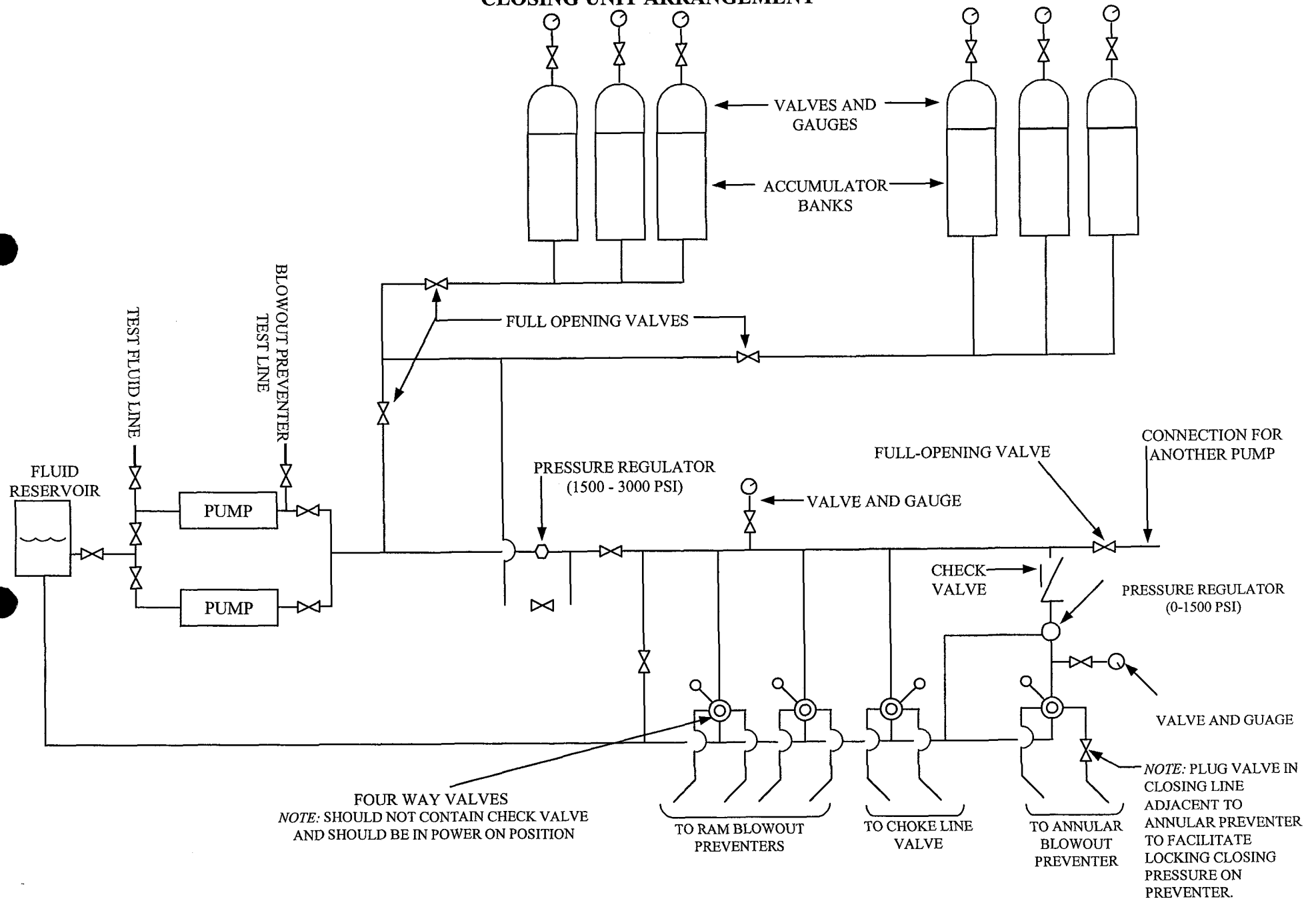
5000 psi Working Pressure

5000 psi Working Pressure

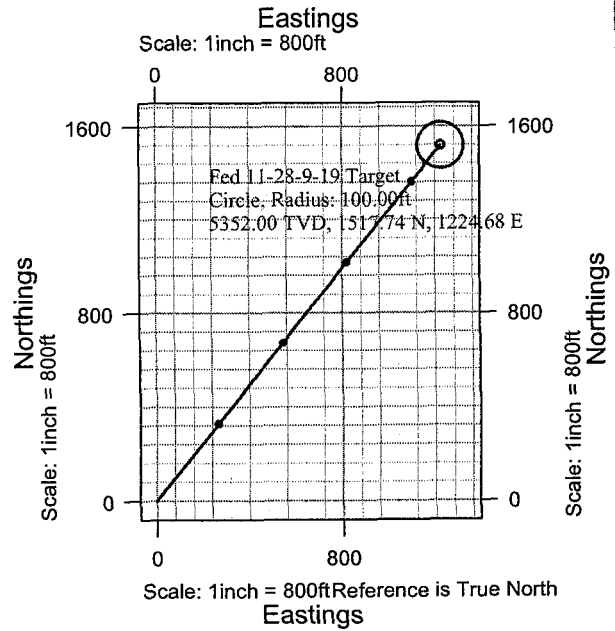
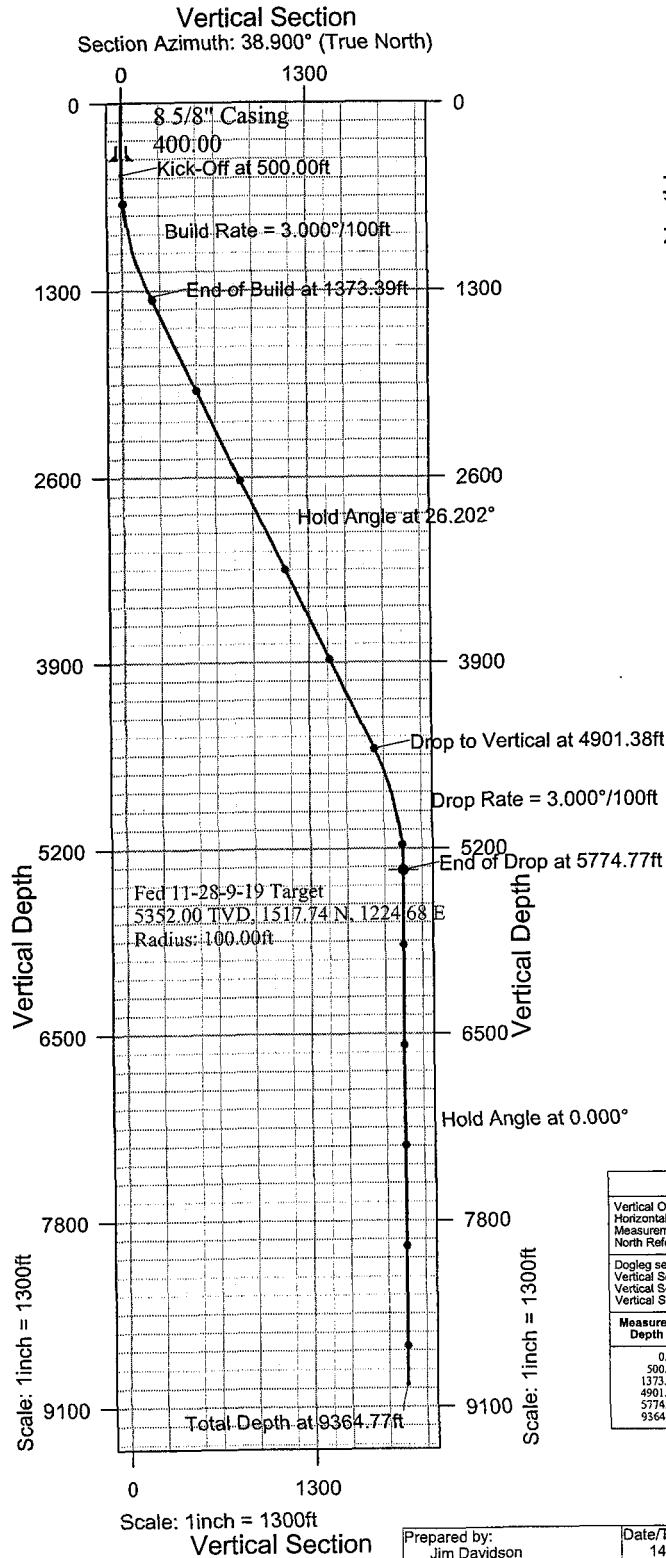
5000 psi Working Pressure

5000 psi Working Pressure

TYPICAL BLOWOUT PREVENTER CLOSING UNIT ARRANGEMENT



**Utah
Uintah County
SENE Sec 29-T9S-R19E PAD**



Proposal Data for Federal 11-28-9-19							
Vertical Origin :		Well Structure					
Horizontal Origin :		ft					
Measurement Units :		True North					
North Reference :		Degrees per 100 feet (US)					
Dogleg severity :		38.900°					
Vertical Section Azimuth :		0.00 N, 0.00 E					
Vertical Section Description:		Structure					
Measured Depth	Incl.	Azim.	Vertical Depth	Northings	Eastings	Vertical Section	Dogleg Rate
0.00	0.000	1.091	0.00	0.00 N	0.00 E	0.00	0.000
500.00	0.000	1.091	500.00	0.00 N	0.00 E	0.00	0.000
1373.39	26.202	38.900	1343.27	152.73 N	123.24 E	196.25	3.000
4901.38	26.202	38.900	4508.73	1365.01 N	1101.44 E	1753.98	0.000
5774.77	0.000	1.091	5352.00	1517.74 N	1224.68 E	1950.22	3.000
9364.77	0.000	1.091	8942.00	1517.74 N	1224.68 E	1950.22	0.000

Gasco

**Utah
Uintah County
SENE Sec 29-T9S-R19E PAD
Federal 11-28-9-19**

PROPOSAL REPORT

14 June, 2001

sperry-sun
DRILLING SERVICES
A Halliburton Company

Proposal Ref: pro5578

Sperry-Sun Drilling Services

Proposal Report for Federal 11-28-9-19



Gasco
Utah

Uintah County
SENE Sec 29-T9S-R19E PAD

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
500.00	0.000	0.000	500.00	0.00 N	0.00 E	0.00	0.000
600.00	3.000	38.900	599.95	2.04 N	1.64 E	2.62	3.000
700.00	6.000	38.900	699.63	8.14 N	6.57 E	10.46	3.000
800.00	9.000	38.900	798.77	18.30 N	14.77 E	23.51	3.000
900.00	12.000	38.900	897.08	32.48 N	26.21 E	41.74	3.000
1000.00	15.000	38.900	994.31	50.65 N	40.87 E	65.08	3.000
1100.00	18.000	38.900	1090.18	72.75 N	58.70 E	93.48	3.000
1200.00	21.000	38.900	1184.43	98.72 N	79.66 E	126.85	3.000
1300.00	24.000	38.900	1276.81	128.50 N	103.69 E	165.12	3.000
1373.39	26.202	38.900	1343.27	152.73 N	123.24 E	196.25	3.000
2000.00	26.202	38.900	1905.49	368.04 N	296.98 E	472.92	0.000
3000.00	26.202	38.900	2802.73	711.66 N	574.25 E	914.45	0.000
4000.00	26.202	38.900	3699.98	1055.28 N	851.52 E	1355.99	0.000
4901.38	26.202	38.900	4508.73	1365.01 N	1101.44 E	1753.98	0.000
5000.00	23.243	38.900	4598.30	1397.11 N	1127.34 E	1795.22	3.000
5100.00	20.243	38.900	4691.18	1425.93 N	1150.60 E	1832.26	3.000
5200.00	17.243	38.900	4785.87	1450.94 N	1170.78 E	1864.39	3.000
5300.00	14.243	38.900	4882.10	1472.05 N	1187.81 E	1891.52	3.000
5400.00	11.243	38.900	4979.63	1489.22 N	1201.66 E	1913.57	3.000
5500.00	8.243	38.900	5078.18	1502.38 N	1212.29 E	1930.49	3.000
5600.00	5.243	38.900	5177.47	1511.52 N	1219.66 E	1942.23	3.000
5700.00	2.243	38.900	5277.25	1516.60 N	1223.76 E	1948.76	3.000
5774.77	0.000	0.000	5352.00	1517.74 N	1224.68 E	1950.22	3.000
9364.77	0.000	0.000	8942.00	1517.74 N	1224.68 E	1950.22	0.000

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North.
Vertical depths are relative to Well. Northings and Eastings are relative to Structure.

The Dogleg Severity is in Degrees per 100 feet (US).
Vertical Section is from Structure and calculated along an Azimuth of 38.900° (True).

Based upon Minimum Curvature type calculations, at a Measured Depth of 9364.77ft.,
The Bottom Hole Displacement is 1950.22ft., in the Direction of 38.900° (True).

Comments

Measured Depth (ft)	TVD (ft)	Station Coordinates Northings (ft)	Eastings (ft)	Comment
500.00	500.00	0.00 N	0.00 E	Kick-Off at 500.00ft
936.70	932.90	38.69 N	31.22 E	Build Rate = 3.000°/100ft
1373.39	1343.27	152.73 N	123.24 E	End of Build at 1373.39ft
3137.39	2926.00	758.87 N	612.34 E	Hold Angle at 26.202°
4901.38	4508.73	1365.01 N	1101.44 E	Drop to Vertical at 4901.38ft
5338.07	4919.10	1479.05 N	1193.46 E	Drop Rate = 3.000°/100ft
5774.77	5352.00	1517.74 N	1224.68 E	End of Drop at 5774.77ft
7569.77	7147.00	1517.74 N	1224.68 E	Hold Angle at 0.000°
9364.77	8942.00	1517.74 N	1224.68 E	Total Depth at 9364.77ft

Sperry-Sun Drilling Services

Proposal Report for Federal 11-28-9-19



Gasco
Utah

Uintah County
SENE Sec 29-T9S-R19E PAD

Formation Tops

Measured Depth (ft)	Vertical Depth (ft)	Sub-Sea Depth (ft)	Northings (ft)	Eastings (ft)	Dip Deg.	Dip Dir. Deg.	Formation Name
1884.66	1802.00	-3050.00	328.41 N	265.00 E	0.000	0.001	Green River
5774.77	5352.00	500.00	1517.74 N	1224.68 E	0.000	0.001	Wasatch

Casing details

From		To		Casing Detail
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	
<Surface>	<Surface>	400.00	400.00	8 5/8" Casing

Targets associated with this wellpath

Target Name	Target Entry Coordinates			Target Shape	Target Type
	TVD (ft)	Northings (ft)	Eastings (ft)		
Fed 11-28-9-19 Target	5352.00	1517.74 N	1224.68 E	Circle	Current Target

PANNONIAN ENERGY, INC.

Federal 11-28-9-19
SHL: SENE, Section 29-T9S-R19E
BHL: Section 28-T9S-R19E
Uintah County, Utah
Lease No. UTU-76262

SURFACE USE PLAN

An onsite inspection for the subject well was conducted on June 26, 2001. Weather conditions at the time of the onsite inspection were overcast and windy. In attendance were the following individuals:

Stan Olmstead – Bureau of Land Management
Robert Kay – Uintah Engineering & Land Surveying
Robin Dean – Pannonian Energy, Inc.
Kelly Olds – Halliburton Integrated Solutions
Sheila Bremer – Halliburton Integrated Solutions

1. EXISTING ROADS:

Refer to Topo Maps A and B for location of existing access roads.

See Topo Map A for directions to the proposed location from Myton, Utah.

The existing roads will be maintained and kept in good repair.

2. ACCESS ROADS TO BE CONSTRUCTED:

Approximately 0.5 miles of new road will be required to access the proposed location.

The proposed access road was centerline staked.

The new road will be completed as a single lane 18-foot subgrade road with natural low water crossings (see Topo Map B).

Maximum grade will be less than eight percent.

There are no major cuts or fills, turnouts, or bridges anticipated along the proposed access route.

No gates, cattleguards, fence cuts, or modifications to existing facilities will be required on or along the proposed access route.

The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with water turnouts installed as necessary to provide for proper drainage along the access road route.

Construction activity will not be conducted using frozen or saturated soils material or during periods when watershed damage is likely to occur.

The access road and associated drainage structures will be constructed and maintained in accordance with roading guidelines contained in the joint BLM/USFS publication: *Surface Operating Standards for Oil and Gas Exploration and Development*, Third Edition, and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction. During the drilling and production phase of operations, the road surface and shoulders will be kept in a safe and useable condition and drainage ditches and culverts will be kept clear and free flowing.

If the access road is dry during construction, drilling, and completion activities, water will be applied to the access road to help facilitate road compaction (during construction) and to minimize soil loss as a result of wind erosion.

3. LOCATION OF EXISTING WELLS WITHIN A ONE-MILE RADIUS:

See Topo Map C.

- Water wells – 0
- Abandoned wells – 0
- Temporarily Abandoned wells – 0
- Disposal wells – 0
- Drilling/Proposed wells – 3
- Producing wells – 2
- Shut-in wells – 0
- Injection wells – 0
- Monitoring wells – 0

4. LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES:

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope.

Containment berms will be constructed completely around production facilities designed to hold fluids (i.e., production tanks, produced water tanks, and/or heater/treater). The containment berms will be constructed of compacted subsoil, be sufficiently impervious, hold 110 percent of the capacity of the largest tank, and be independent of the back cut.

All loading lines will be placed inside the berm surrounding the tank battery.

All permanent (on site six months or longer) aboveground structures constructed or installed on location and not subject to safety requirements will be painted Carlsbad Canyon (Munsell standard color 2.5y 6/2).

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flow line will be buried or anchored down from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be

conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The Authorized Officer will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal Field Office. All meter measurement facilities will conform with Onshore Oil and Gas Order No. 4 for liquid hydrocarbons and Onshore Oil and Gas Order No. 5 for natural gas measurement.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the Authorized Officer.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water for drilling will be obtained from the Dalbo Ouray Water Facility located in Section 32-T4S-R3E, Water Use Claim #43-8496, Application #53617. No water supply well will be drilled.

The water will be transported to location via truck by an approved commercial water hauler over the access roads shown on Topo Maps A and B.

6. SOURCE OF CONSTRUCTION MATERIALS:

Surface and subsoil materials in the immediate area will be utilized. Any construction materials that may be required for surfacing of the drill pad and access road will be obtained from a contractor having a permitted source of materials within the general area.

The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2-3.

No construction materials will be removed from Federal lands without prior approval.

7. METHODS OF HANDLING WASTE DISPOSAL:

Cuttings and drilling fluids will be contained in the reserve pit.

Tanks will be used for storage of produced fluids during testing. Fracture stimulation fluids will be flowed back into the reserve pit for evaporation.

Portable, self-contained chemical toilets will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to disposal of human and solid waste will be complied with.

All garbage and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage. Upon completion of operations, or as needed, the accumulated trash will be transported to a state approved waste disposal site. No trash will be placed in the reserve pit.

Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location. Any open pits will be fenced

during drilling operations and said fencing will be maintained until such time as the pits have been backfilled.

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location will be submitted for the Authorized Officer's approval.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

Operator maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be found at the site may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/ stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous and EHS and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

8. *ANCILLARY FACILITIES:*

None anticipated.

9. *WELL SITE LAYOUT:*

A. General Information:

See the attached *Location Layout* and *Typical Cross Sections* diagrams showing the proposed drill pad cross sections and cut and fills in relation to topographic features as well as access onto the pad and soil stockpiles.

See the attached *Typical Rig Layout* diagram showing the location of the reserve pit, flare pit, living facilities, and rig orientation with respect to the pad and other facilities.

If necessary, in order to divert surface runoff, a drainage ditch will be constructed around the upslope side of the well site.

All equipment and vehicles will be confined to the approved disturbed areas of this APD (i.e., access road, well pad, and spoil and topsoil storage areas).

The fill section of the pad that supports the drilling rig and any other heavy equipment will be compacted.

B. Reserve Pit:

The reserve pit will be constructed in a way that minimizes the accumulation of surface precipitation runoff into the pit. This may be accomplished by appropriate placement of subsoil/topsoil storage areas and/or construction of berms or ditches.

The reserve pit will be fenced on three sides during drilling operations and the fourth side will be fenced after the drilling rig moves off the location. Thirty-nine (39) inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire will not be used if pipe or some type of reinforcement rod is attached to the top of the entire fence. The net wire will be no more than two inches above the ground. The barbed wire will be three inches over the net wire. Total height of the fence will be at least 42 inches. Corner posts will be cemented and/or braced in such a manner to keep the fence tight at all times. Standard steel, wood, or pipe posts will be used between the corner braces. Maximum distance between any 2 fence posts will not be greater than 16 feet. All wire will be stretched using a stretching device before it is attached to the corner posts.

Siphons, catchments, and/or absorbent pads will be installed to keep hydrocarbons produced by the drilling rig from entering the reserve pit. Hydrocarbons and contaminated pads will be disposed of in accordance with DEQ requirements.

The reserve pit will be backfilled as soon as dry after drilling and completion operations are finished. If natural evaporation of the reserve pit is not feasible, alternative methods of drying, removal of fluids, or other treatment will be developed. If fluids will be disposed of by any method other than evaporation or hauling to a DEQ approved disposal pit, prior approval from the Authorized Officer will be obtained.

If a liner is required, then the reserve pit will be lined with a synthetic liner. The reserve pit bottom and side walls shall be void of any sharp rocks that could puncture the liner. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, or bentonite) that could damage the liner. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place.

10. PLANS FOR RECLAMATION OF THE SURFACE:

Producing Location:

- Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.
- If a synthetic, nylon reinforced, liner is used, the excess liner will be cut off and removed and the remaining liner will be torn and perforated while backfilling the reserve pit. Alternatively, the pit will be pumped dry, the liner folded into the pit, and the pit backfilled.
- Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

- The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion, weather permitting. This will be completed by backfilling and crowning the pit to prevent water from standing.
- Seeding will be performed immediately after the location has been reclaimed and the pit has been backfilled, regardless of the time of year. The Bureau of Land Management will specify a seed mixture. Seed will be broadcast and walked in with a dozer. The topsoil stockpile will be seeded as soon as the location has been constructed with the same recommended seed mix.

Dry Hole/Abandoned Location:

- On lands administered by the BLM, abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions may include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and the re-establishment of vegetation as specified.
- All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. SURFACE OWNERSHIP:

Surface ownership of the proposed location is as follows:

Well Site & Access Road: Bureau of Land Management

12. OTHER INFORMATION:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice of Lessees. The operator is fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

The Operator will control noxious weeds along right-of-ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM or the appropriate County Extension Office. On BLM administered land, it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides or other pesticides or possibly hazardous chemicals.

Drilling rigs and/or equipment used during drilling operations on this location will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. If BLM authorization is obtained, such storage is only a temporary measure.

The Operator is responsible for informing all persons in the area who are associated with this project that they may be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts. All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to the areas examined, as referenced in the archaeological report, and to the existing roadways and/or evaluated access routes. If historic or archaeological materials are uncovered during construction, the Operator is to immediately stop work that might further disturb such materials and contact the Authorized Officer. Within five working days, the Authorized Officer will inform the Operator as to:

- whether the materials appear eligible for the National Historic Register of Historic Places;
- the mitigation measures the Operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
- a time frame for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.
- If the Operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise the Operator will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that required mitigation has been completed, the Operator will then be allowed to resume construction.

A Class III archeological survey has been conducted by Metcalf Archeological Consultants. No significant cultural resources were found and clearance is recommended. Metcalf Archeological Consultants will submit a copy of this report to the appropriate agencies.

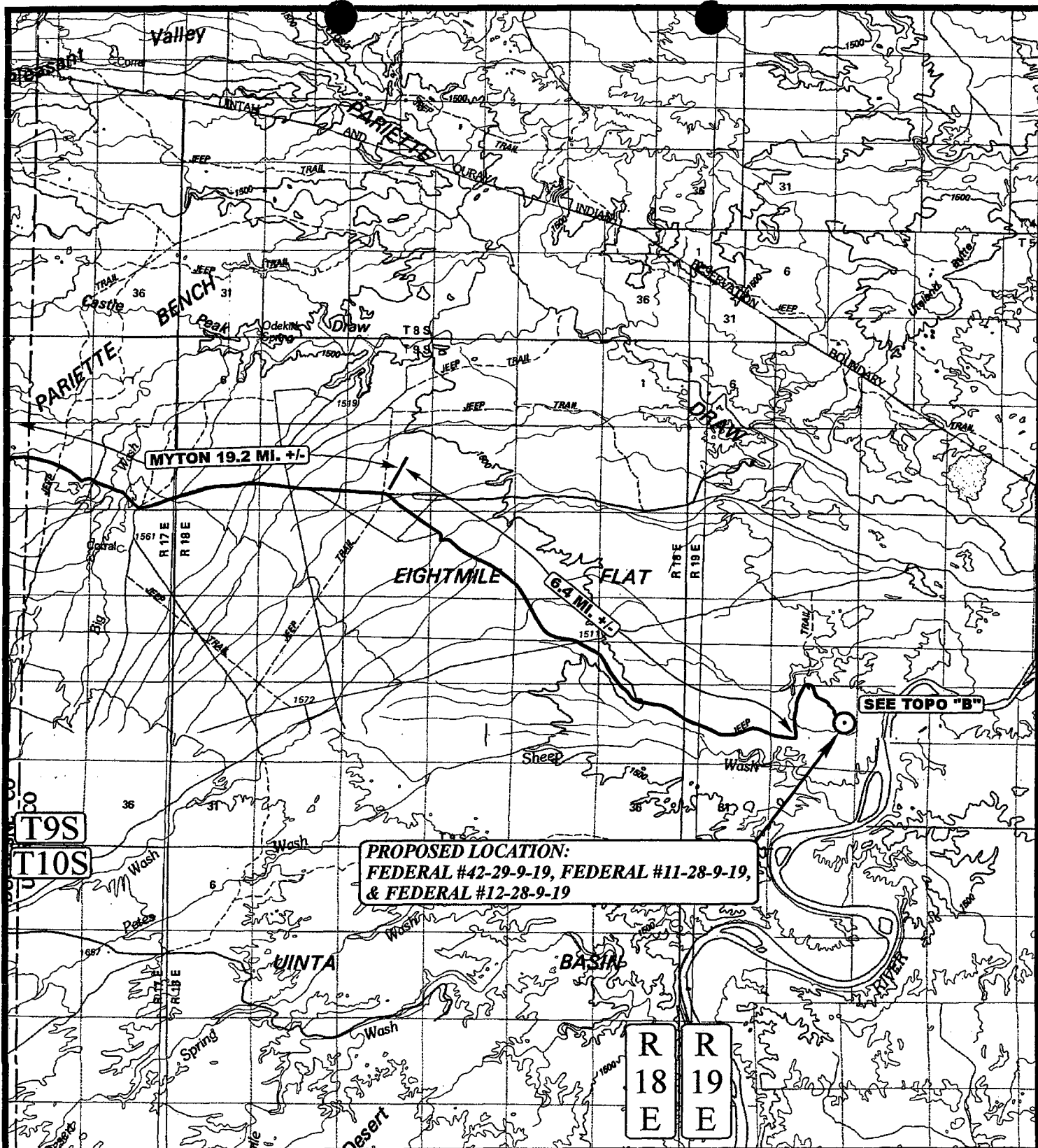
13. LESSEE OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:

Mike Decker
Pannonian Energy, Inc.
14 Inverness Drive East
Suite H-236
Englewood, Colorado 80112-5625
(303) 204-3880

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Pannonian Energy, Inc., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

7-5-01
Date

Howard A. Sharpe
Howard Sharpe, Vice President



LEGEND:

○ PROPOSED LOCATION

PANNONION ENERGY, INC.

FEDERAL #42-29-9-19, FEDERAL #11-28-9-19,
& FEDERAL #12-28-9-19

SECTION 29, T9S, R19E, S.L.B.&M.
SE ¼ NE ¼



Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

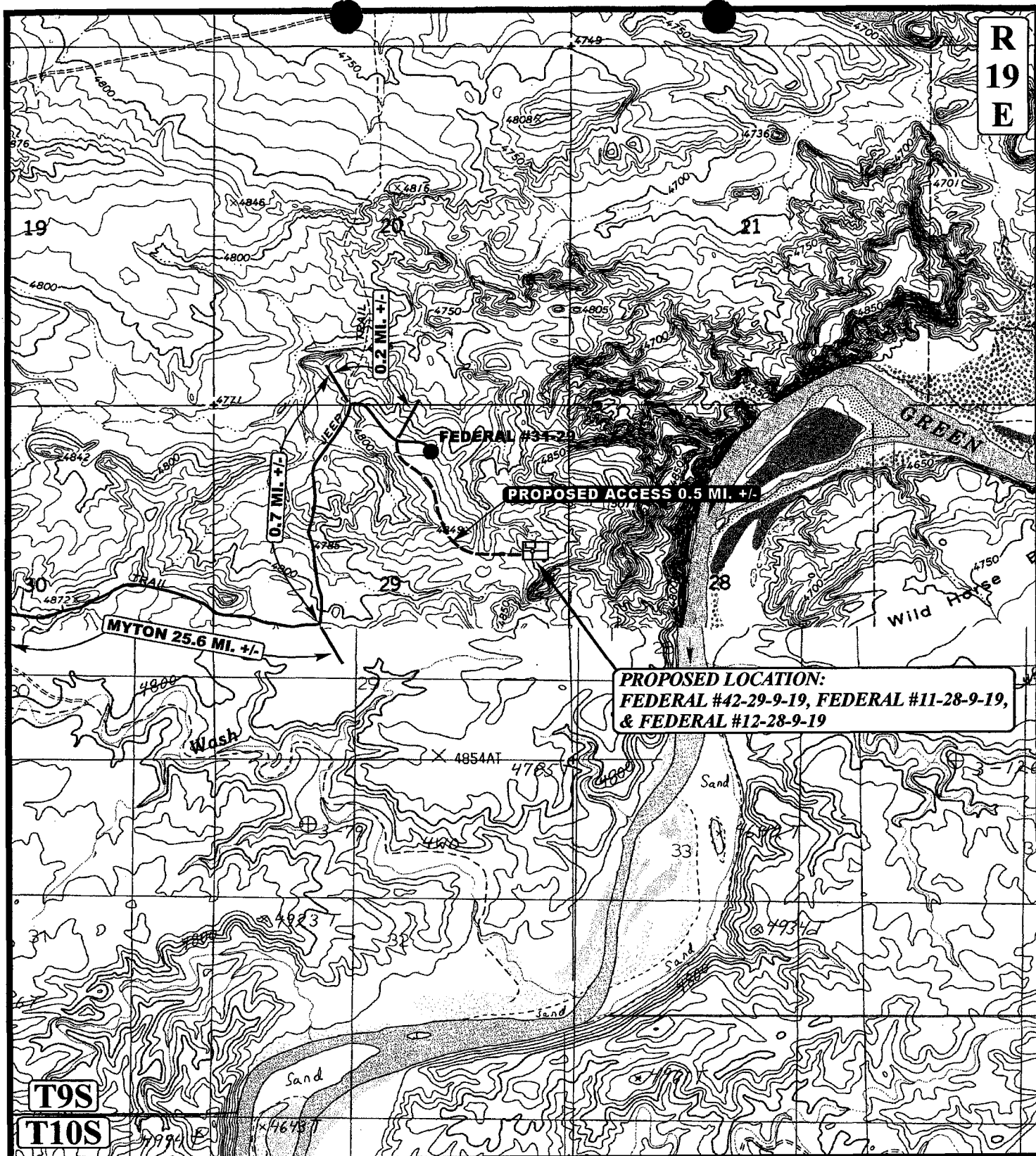


TOPOGRAPHIC
MAP

6 13 01
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: K.G. REVISED: 00-00-00

A
TOPO



LEGEND:

----- PROPOSED ACCESS ROAD
 _____ EXISTING ROAD



PANNONION ENERGY, INC.

FEDERAL #42-29-9-19, FEDERAL #11-28-9-19,
 & FEDERAL #12-28-9-19
 SECTION 29, T9S, R19E, S.L.B.&M.
 SE ¼ NE ¼



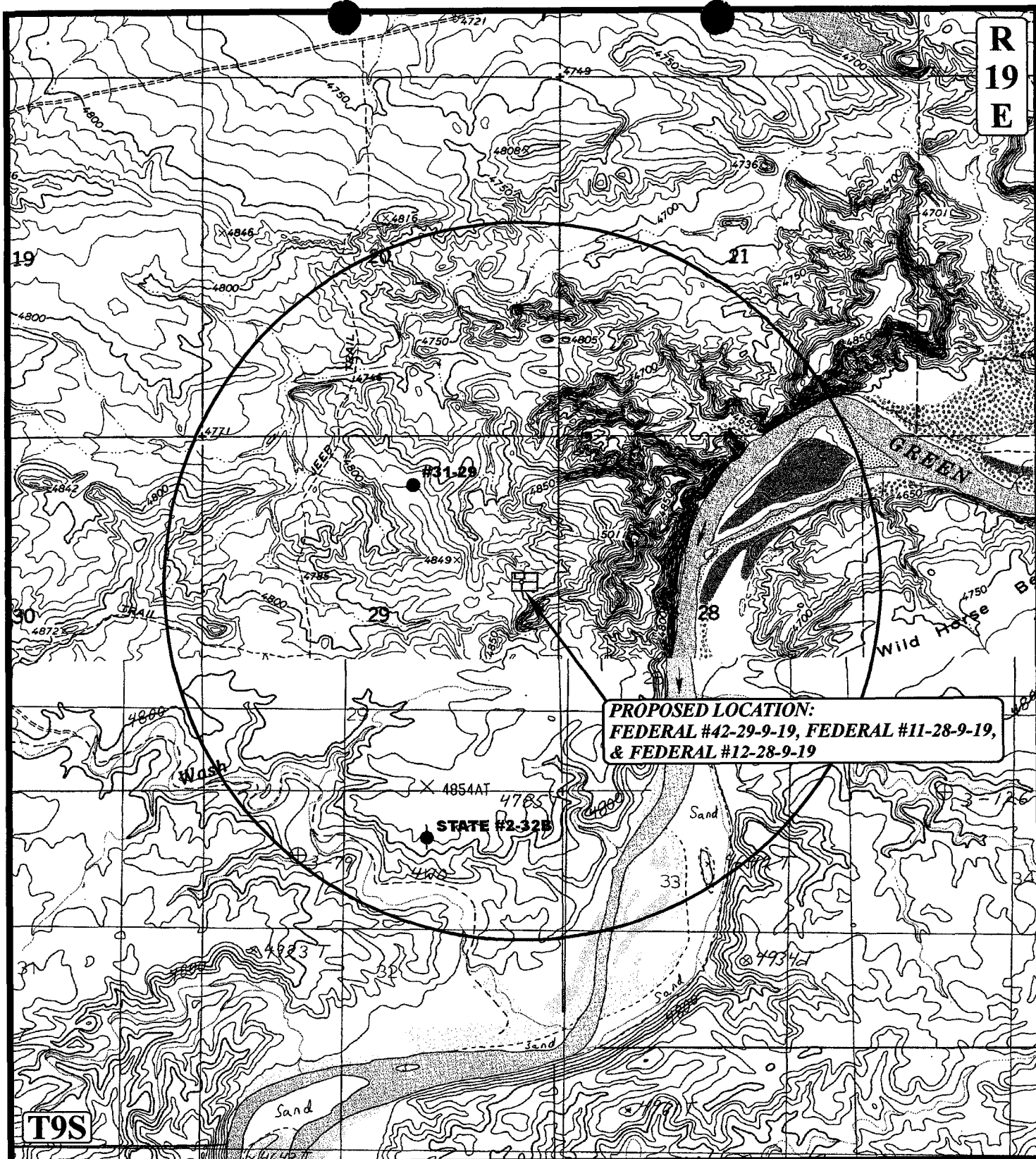
Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

**TOPOGRAPHIC
 MAP**

6 13 01
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: K.G. REVISED: 00-00-00

B
 TOPO



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

PANNONION ENERGY, INC.

FEDERAL #42-29-9-19, FEDERAL #11-28-9-19,
 & FEDERAL #12-28-9-19
 SECTION 29, T9S, R19E, S.L.B.&M.
 SE ¼ NE ¼



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC
MAP

6 13 01
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: K.G. REVISED: 00-00-00

C
TOPO

PANNONIAN ENERGY, INC.

LOCATION LAYOUT FOR

FEDERAL #42-29-9-19, FEDERAL #11-28-9-19
& FEDERAL #12-28-9-19

SECTION 29, T9S, R19E, S.L.B.&M.

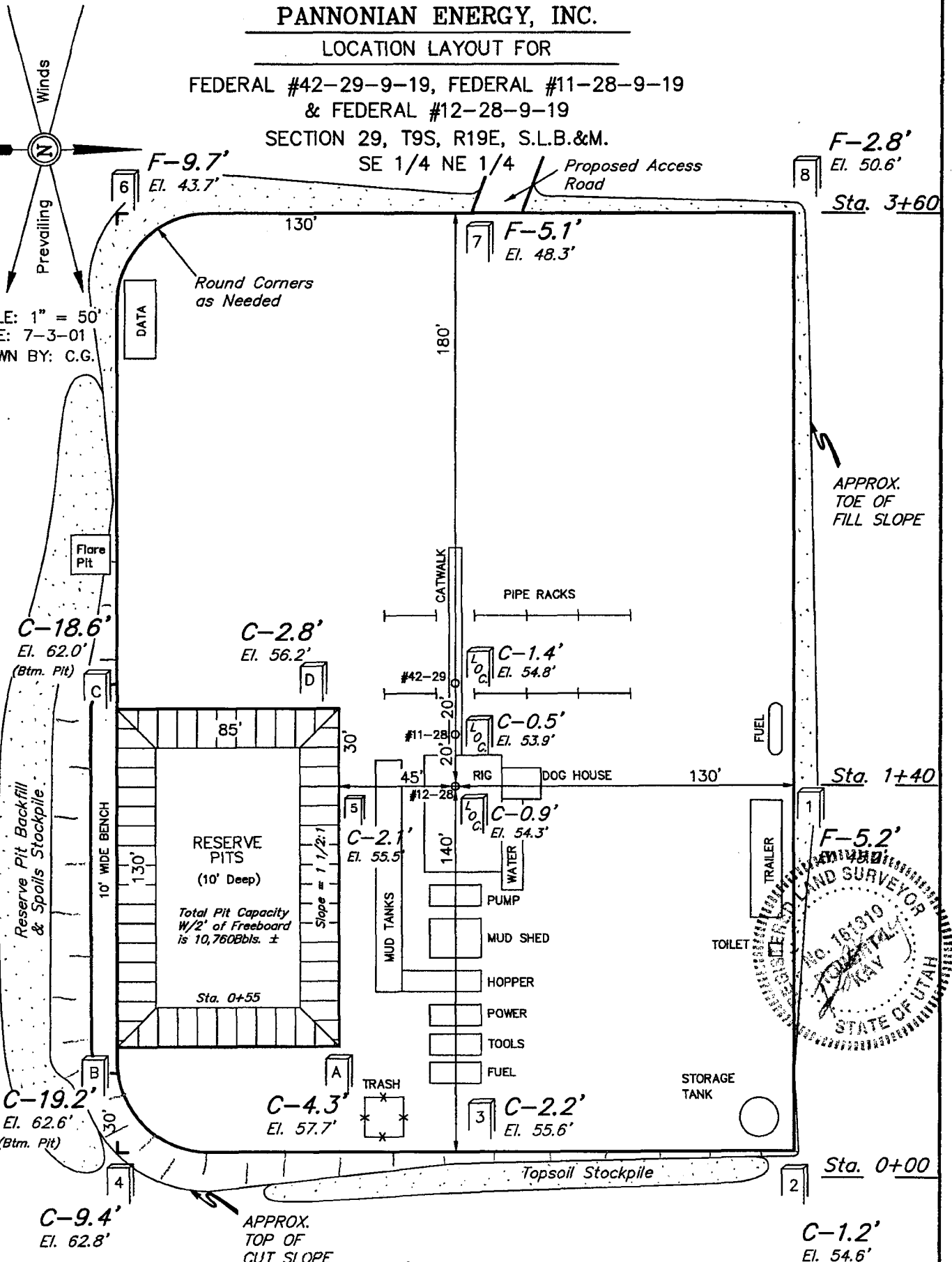
SE 1/4 NE 1/4

Proposed Access Road

F-2.8'
El. 50.6'

Sta. 3+60

SCALE: 1" = 50'
DATE: 7-3-01
DRAWN BY: C.G.



Elev. Ungraded Ground at Location Stake = 4854.3'
Elev. Graded Ground at Location Stake = 4853.4'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

PANNONIAN ENERGY, INC.

TYPICAL CROSS SECTION FOR

FEDERAL #42-29-9-19, FEDERAL #11-28-9-19

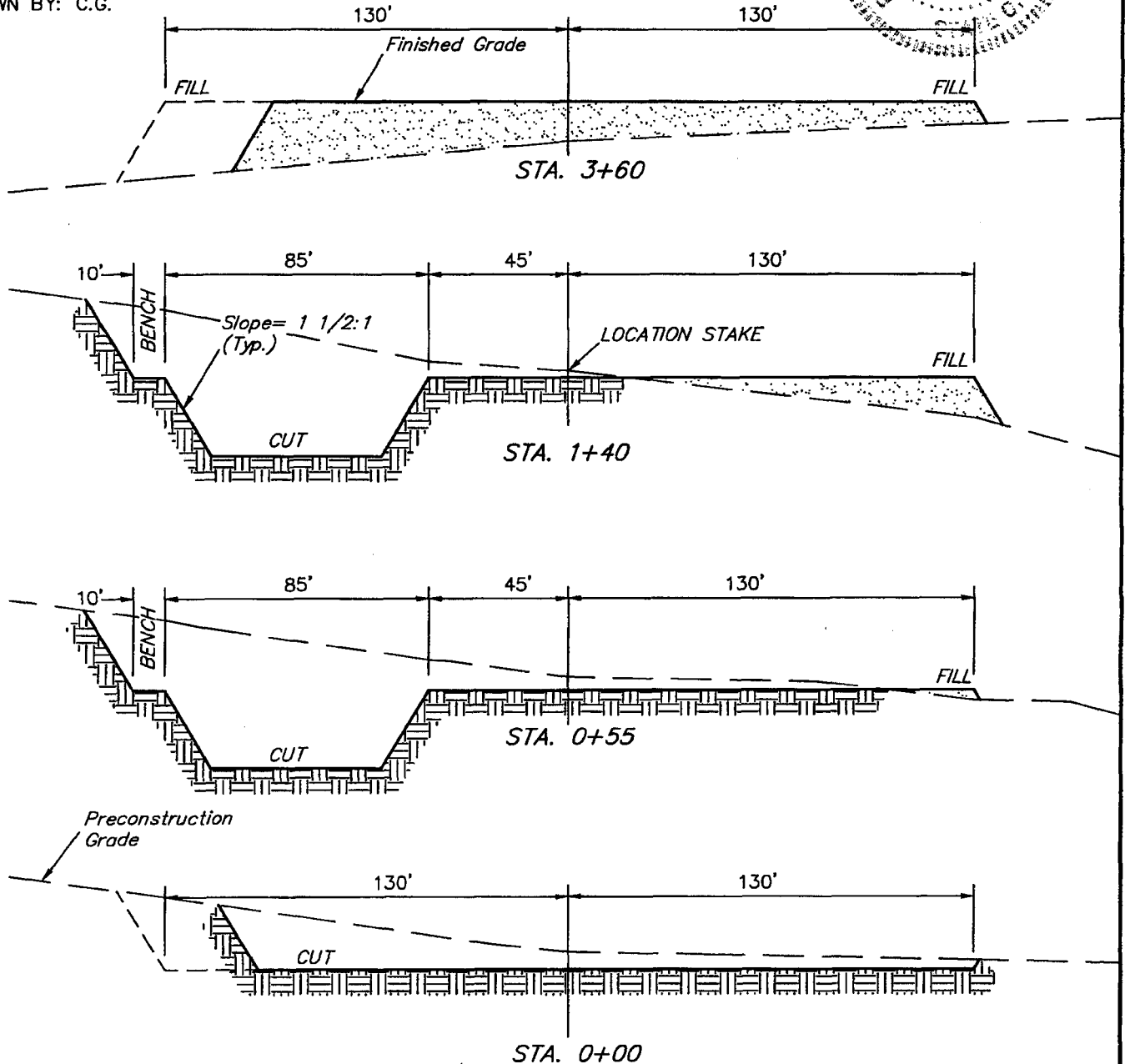
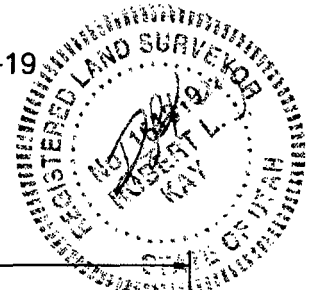
& FEDERAL #12-28-9-19

SECTION 29, T9S, R19E, S.L.B.&M.

SE 1/4 NE 1/4

1" = 20'
X-Section
Scale
1" = 50'

DATE: 7-3-01
DRAWN BY: C.G.



APPROXIMATE YARDAGES

CUT
(6") Topsoil Stripping = 1,760 Cu. Yds.
Remaining Location = 8,720 Cu. Yds.
TOTAL CUT = 10,480 CU.YDS.
FILL = 6,850 CU.YDS.

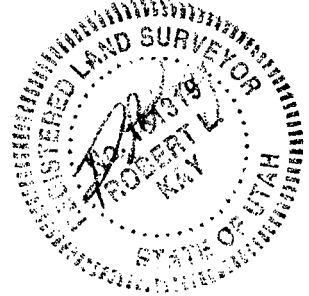
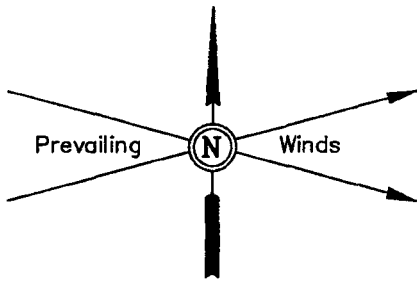
EXCESS MATERIAL AFTER
5% COMPACTION = 3,270 Cu. Yds.
Topsoil & Pit Backfill = 3,270 Cu. Yds.
(1/2 Pit Vol.)
EXCESS UNBALANCE = 0 Cu. Yds.
(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

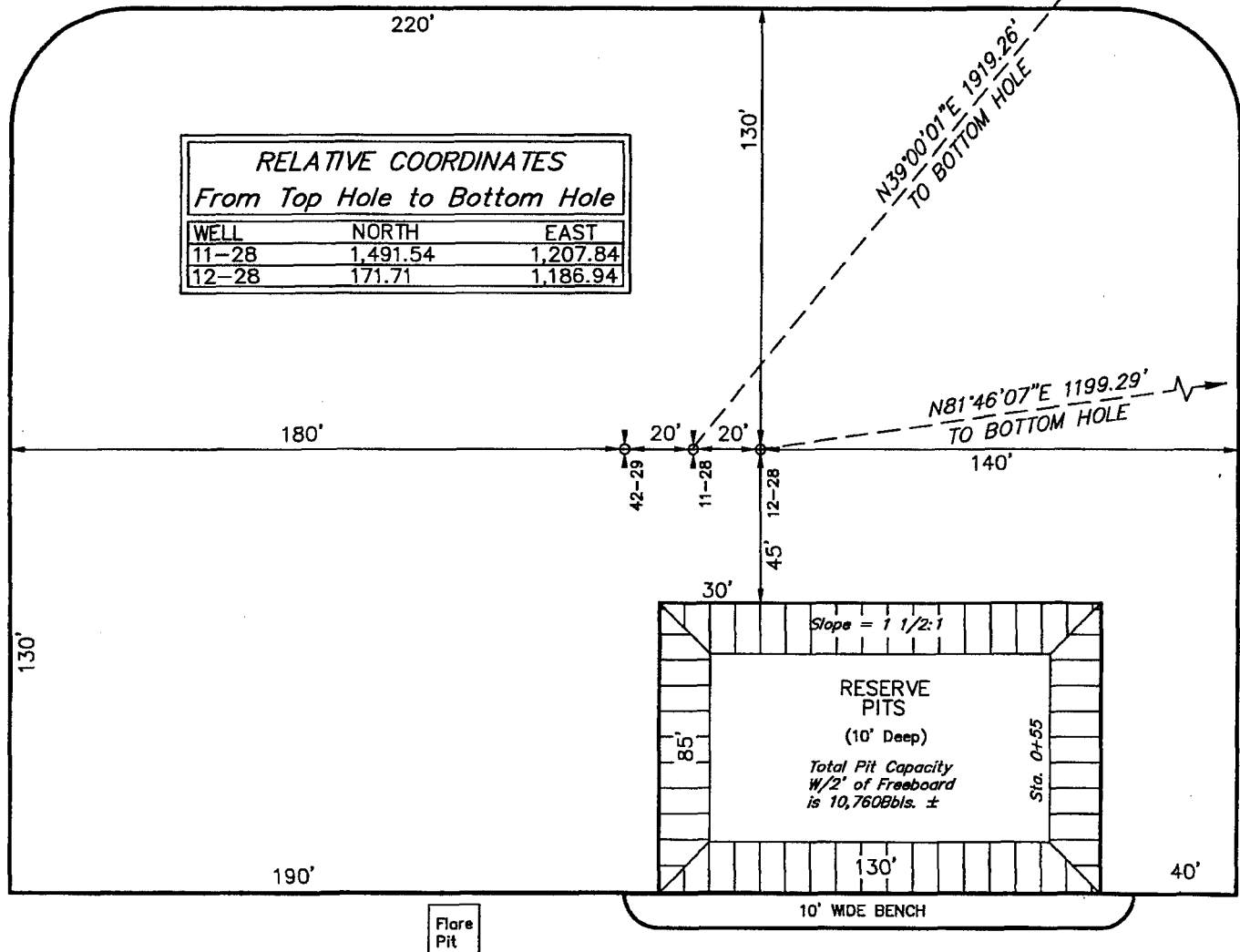
PANNONIAN ENERGY, INC.

DIRECTIONAL LAYOUT FOR

FEDERAL #42-29-9-19, FEDERAL #11-28-9-19
& FEDERAL #12-28-9-19
SECTION 29, T9S, R19E, S.L.B.&M.
SE 1/4 NE 1/4



SCALE: 1" = 50'
DATE: 6-12-01
DRAWN BY: C.G.
REVISED: 7-6-01



WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 07/11/2001

API NO. ASSIGNED: 43-047-34193

WELL NAME: FED 11-28-9-19

OPERATOR: PANNONIAN ENERGY INC (N1815)

CONTACT: HOWARD SHARPE

PHONE NUMBER: 303-483-0044

PROPOSED LOCATION:

SENE 29 090S 190E

SURFACE: 2152 FNL 0547 FEL

BOTTOM: 0660 FNL 0660 FWL

UINTAH

PARIETTE BENCH (640)

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-76262

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSTC

INSPECT LOCATN BY: / /

Tech Review

Initials

Date

Engineering

Geology

Surface

RECEIVED AND/OR REVIEWED:

☒ Plat
☒ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. 4127759)
☒ Potash (Y/N)
☒ Oil Shale 190-5 (B) or 190-3 or 190-13
☒ Water Permit
(No. 43-8496)
☒ RDCC Review (Y/N)
(Date:)
☒ Fee Surf Agreement (Y/N)

LOCATION AND SITING:

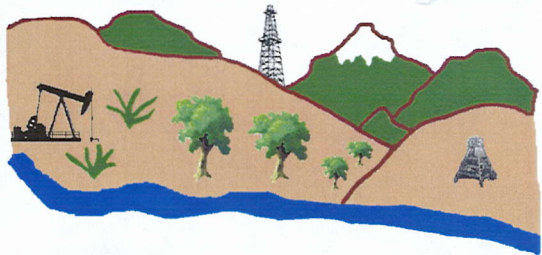
☐ R649-2-3. Unit
☐ R649-3-2. General
☒ Siting: 460 From Qtr/Qtr & 920' Between Wells
☒ R649-3-3. Exception
☐ Drilling Unit
Board Cause No: _____
Eff Date: _____
Siting: _____
☒ R649-3-11. Directional Drill

COMMENTS:

Need "Ex. Loc" info & "Direct. Dr" info. (Rec'd 9-24-01 & 10-9-01)

STIPULATIONS:

1- Fed. Apv'l.
2- Spacing Stip.



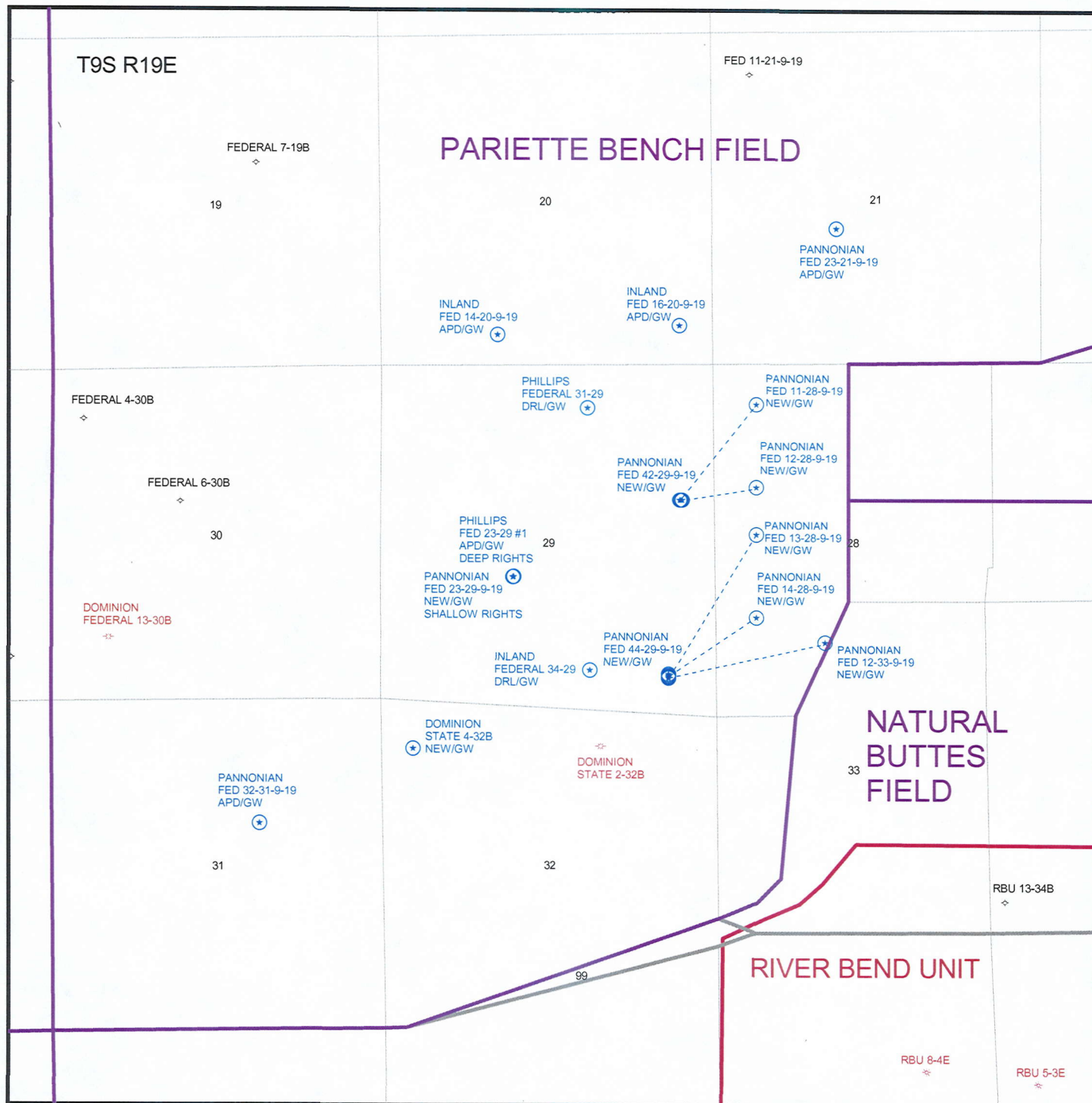
Utah Oil Gas and Mining

OPERATOR: PANNONIAN ENERGY (N1815)

SEC. 28 & 29, T9S, R19E

FIELD: PARIETTE BENCH (640)

COUNTY: UINTAH





HALLIBURTON

HALLIBURTON ENERGY SERVICES

410 - 17th Street, Suite 800 / Denver, CO 80202 / 303-308-4200 / Fax: 303-308-4238

September 18, 2001

RECEIVED

SEP 24 2001

DIVISION OF
OIL, GAS AND MINING

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, UT 84114-5801

Attention: Lisha Cordova

Re: Pannonian Energy Inc.

Application for Permit to Drill – Well Federal 11-28-9-19

Dear Lisha,

I understand there is an issue on this well due to the well being closer than 920' to another wellbore and it being a directional well. The reason this is a directional well is due to the requirement that the surface facilities be out of sight of the Green River. If we were to drill the wells in a more vertical location, they would be visible from the river. The surface location and the bottom hole location are on the same lease and have the same mineral owners. The well path does not pass within 460' of any other lease.

I hope this answers all your questions. Please call me if there are any other concerns.

Sincerely,

Kelly T. Olds
Lead Well Engineer



HALLIBURTON

HALLIBURTON ENERGY SERVICES

410 - 17th Street, Suite 800 / Denver, CO 80202 / 303-308-4200 / Fax: 303-308-4238

October 3, 2001

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, UT 84114-5801

Attention: Lisha Cordova

Re: Pannonian Energy Inc.

Application for Permit to Drill – Well Federal 11-28-9-19

Dear Lisha,

I understand there is an issue on this well due to the well being closer than 920' to another wellbore and it being a directional well. The reason this is a directional well is due to the requirement that the surface facilities be out of sight of the Green River. If we were to drill the wells in a more vertical location, they would be visible from the river. The surface location and the bottom hole location are on the same lease and have the same mineral owners. The well path does not pass within 460' of any other lease.

Pannonian Energy, Inc. is the designated operator of the lease.

I hope this answers all your questions. Please call me if there are any other concerns.

Sincerely,

Kelly T. Olds
Lead Well Engineer

RECEIVED

OCT 09 2001

DIVISION OF
OIL, GAS AND MINING



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

October 15, 2001

Pannonian Energy Inc.
14 Inverness Dr. E
Englewood, CO 80112

Re: Federal 11-28-9-19 Well, Surface Location 2152' FNL, 547' FEL, SE NE,
Sec. 29, T. 9 South, R. 19 East, Bottom Location 660' FNL, 660' FWL, NW NW,
Sec. 28, T. 9 South, R. 19 East, Uintah County, Utah

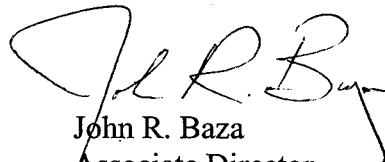
Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34193.

Sincerely,



John R. Baza
Associate Director

dm

Enclosures

cc: Uintah County Assessor
Bureau of Land Management, Vernal District Office

Operator: Pannonian Energy Inc.
Well Name & Number Federal 11-28-9-19
API Number: 43-047-34193
Lease: UTU 76262

Surface Location: SE NE Sec. 29 T. 9 South R. 19 East
Bottom Location: NW NW Sec. 28 T. 9 South R. 19 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED
JUL 11 2001

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-76262
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Pannonian Energy, Inc.		7. If Unit or CA Agreement, Name and No. N/A
3A. Address 14 Inverness Dr. E., Englewood, CO 80112	3b. Phone No. (include area code) (303) 483-0044	8. Lease Name and Well No. Federal 11-28-9-19
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2152' FNL & 547' FEL (SENE) At proposed prod. Zone 660' FNL & 660' FWL, Section 28-T9S-R19E		9. API Well No.
14. Distance in miles and direction from nearest town or post office* Approximately 27 miles from Myton, Utah		10. Field and Pool, or Exploratory Riverbend
13. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 547'	16. No. of Acres in lease 900.18	11. Sec., T., R., M., or Blk. and Survey or Area SHL: Section 29-T9S-R19E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. See Map C	17. Spacing Unit dedicated to this well 40	12. County or Parish Uintah
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4854' GL	19. Proposed Depth 9364' MD	13. State UT
22. Approximate date work will start* Upon Approval		20. BLM/BIA Bond No. on file Utah BLM Bond No. 4127759
23. Estimated duration 22' days		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office. | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature <i>Howard A. Sharpe</i>	Name (Printed/Typed) Howard Sharpe	Date 7-5-01
Title Vice President		
Approved by (Signature) <i>Howard B. Leavengood</i>	Name (Printed/Typed)	Date 01/08/2002
Title Assistant Field Manager Mineral Resources	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

RECEIVED

JAN 17 2002

DIVISION OF
OIL, GAS AND MINING

DAGMA

01PS0952A

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Pannonian Energy, Inc.

Well Name & Number: Federal 11-28-9-19

API Number: 43-047-34193

Lease Number: U - 76262

Surface Location: SENE Sec. 29 T. 09S R. 19E

Down Hole Location: NWNW Sec. 28 T. 09S R. 19E

Agreement: N/A

NOTIFICATION REQUIREMENTS

- | | | |
|---------------------------------|---|---|
| Location Construction | - | at least forty-eight (48) hours prior to construction of location and access roads. |
| Location Completion | - | prior to moving on the drilling rig. |
| Spud Notice | - | at least twenty-four (24) hours prior to spudding the well. |
| Casing String and Cementing | - | at least twenty-four (24) hours prior to running casing and cementing all casing strings. |
| BOP and Related Equipment Tests | - | at least twenty-four (24) hours prior to initiating pressure tests. |
| First Production Notice | - | within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days. |

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a **5M** system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the base of the usable water zone, identified at 1,466 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-5(d) shall be submitted to the appropriate Field Office within 60 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (1).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery. All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted on initial meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman (435) 828-7874
Petroleum Engineer

Kirk Fleetwood (435) 828-7875
Petroleum Engineer

BLM FAX Machine (435) 781-4410

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

SURFACE USE PROGRAM
Conditions of Approval (COA)
Pannonian Energy, Inc. - Well No.s 11-28-9-19, 12-28-9-19 & 42-29-9-19

Location and Type of Water Supply:

Your permit to drill identified that the Dalbo Ouray Water facility would be used as the water supply for drilling. If any other water source is necessary it will require additional approval by the authorized officer of the Vernal Field Office.

Source of Construction Materials:

Only subsurface soils will be used for construction. All top soils will be stockpiled and identified in the APD for future reclamation of disturbed areas.

Plans For Reclamation of Location:

All seeding for reclamation operations at this location shall use the following seed mixture:

Gardners saltbush	Atriplex gardneri	3 lbs/acre
shadscale	Atriplex confertifolia	3 lbs/acre
mat salt bush	Atriplex corrugata	3 lbs/acre
galleta grass	Hilaria jamesii	3 lbs/acre

If the seed mixture is to be aerially broadcasted, the pounds per acre shall be doubled. All seed poundages are in Pure Live Seed.

Immediately after construction the stockpiled top soil will be seeded and the seed worked into the soil by "walking" the pile with caterpillar tracks.

Other Information:

If production equipment has a high decibel level; exceeding 95 decibels, the operator shall muffle the equipment to reduce noise to nesting raptors less than 1 mile away.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

5. Lease Serial No.

UTU-76262

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA/Agreement, Name and/or No.

NA

8. Well Name and No.

FEDERAL 11-28-9-19

9. API Well No.

43-047-34193

10. Field and Pool, or Exploratory Area

Riverbend

11. County or Parish, State

Uinta County, Utah

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Pannonian Energy, Inc., a wholly owned subsidiary of Gasco Energy

3a. Address

14 Inverness Drive East, Suite H-236, Englewood, CO

3b. Phone No. (include area code)

303-483-0044

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2152' FNL & 547' FEL (SE/NE), 660' FNL & 660' FWL, Sec. 28-T9S-R19E
SHL: Sec. 28-T9S-R19E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other Extension of |
| <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | APD |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

Gasco Energy, Inc., dba Pannonian Energy Inc., request that the APD for the subject well be extended for one year.

Approved by the
Utah Division
Oil, Gas and Mining

RECEIVED

NOV 22 2002

DIVISION OF
OIL, GAS AND MINING

COPY SENT TO OPERATOR

Date: 12-09-02

Initials: CHD By: [Signature]

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

John Longwell

Title

Signature

Date

Operations Manager

October 10, 2002

Resubmitted
11-19-02

Approved by

THIS SPACE FOR FEDERAL OR STATE USE

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

5. Lease Serial No.

UTU-76262

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA/Agreement, Name and/or No.

NA

8. Well Name and No.

FEDERAL 11-28-9-19

9. API Well No.

10. Field and Pool, or Exploratory Area

Riverbend

11. County or Parish, State

Uinta County, Utah

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Pannonian Energy, Inc., a wholly owned subsidiary of Gasco Energy

3a. Address

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3b. Phone No. (include area code)

303-483-0044

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2152' FNL & 547' FEL (SE/NE), 660' FNL & 660' FWL, Sec. 28-T9S-R19E
SHL: Sec. 28-T9S-R19E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒
- Notice of Intent
-
- ☐
- Subsequent Report
-
- ☐
- Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|--|
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Gasco Energy, Inc., dba Pannonian Energy Inc., request that the APD for the subject well be extended for one year.

CONDITIONS OF APPROVAL ATTACHED

RECEIVED

NOV 22 2002

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

John Longwell

Title

Operations Manager

Signature

Date

October 10, 2002

Approved by

THIS SPACE FOR FEDERAL OR STATE USE

Title
Petroleum Engineer

Date

12/23/02

Office

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

RECEIVED

JAN 03 2003

DIV. OF OIL, GAS & MINING

Pannonian Energy, Inc.
APD Extension

Well: Federal 11-28-9-19

Location: SENE Sec. 28, T9S, R19E

Lease: UTU 76262

CONDITIONS OF APPROVAL

An extension for the referenced APD is granted with the following conditions:

1. The extension will expire 1/8/04
2. No other extensions beyond that time frame will be granted or allowed.

If you have any other questions concerning this matter, please contact Kirk Fleetwood of this office at (435) 781-4486

43,047,34193



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal Field Office

170 South 500 East

Vernal, UT 84078

(435) 781-4400 Fax: (435) 781-4410

<http://www.blm.gov/utah/vernal>



IN REPLY REFER TO:

3160

UT08300

March 5, 2004

Howard Sharpe
Pannonian Energy, Inc.
14 Inverness Dr. E., Suite H-236
Englewood, CO 80112

Re: Notification of Expiration
Well No. Federal 11-28-9-19
NWNW, Sec. 28, T9S, R19E
Uintah County, Utah
Lease No. UTU-76262

Dear Mr. Sharpe:

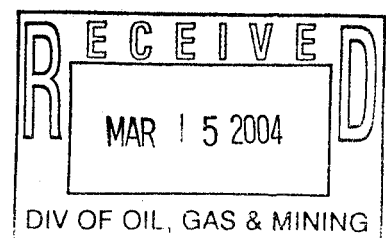
The Application for Permit to Drill the above-referenced well was approved on January 9, 2002. A one (1) year extension of the original APD was requested. The request was reviewed and the extension approved until January 8, 2004. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

Leslie Walker
Legal Instruments Examiner

cc: UDOGM





State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

MICHAEL O. LEAVITT
Governor

OLENE S. WALKER
Lieutenant Governor

March 11, 2004

Ed Trotter
Pannonian Energy, Inc.
P.O. Box 1910
Vernal, Utah 84078

Re: APD Rescinded –Federal 11-28-9-19, Sec. 29, T.9S, R. 19E
Uintah County, Utah API No. 43-047-34193

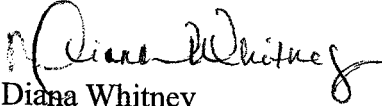
Dear Mr. Trotter:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on October 15, 2001. On December 9, 2002, the Division granted a one-year APD extension. On March 9, 2004, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective March 9, 2004.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,


Diana Whitney
Engineering Technician

cc: Well File
Bureau of Land Management, Vernal